APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,516	01/18/2002	Takashi Toyofuku	Q67107	7766

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EXAMINER
POON, KING Y

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/050,516	TOYOFUKU, TAKASHI
	Examiner	Art Unit	
	King Y. Poon	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 April 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) <u>7-20 and 22</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6 and 21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/18/2002</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 7-20, 22 are withdrawn from further consideration pursuant to 37 CFR

1.142(b) as being drawn to a nonelected species, there being no allowable generic or

linking claim. Election was made **without** traverse in the reply filed on 4/6/2006.

        Applicant identifies 1-6, 16, 19-21 read on elected species. However, claims 16,

19, 20 are directed to determine an image management device is operable and belong

to species II (non-elected species); therefore, claims 16, 19, 20 are also withdrawn from

further considerations.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lobiondo (US 5,287,194) in view of Fan et al (US 6,310,692).

        Regarding claim 1: Lobiondo teaches a system (fig. 1) for forming an image on a

recording medium using a network (column 3, lines 20-25), the system comprising: a

plurality of imaging devices (printer 10, column 3, lines 30-35) each in communication

with the network and operable for forming an image on a recording medium based on

image information received via the network; an imaging indicating device (local stations,

column 3, lines 40-45) in communication with the network, the imaging indicating device

outputting job information including at least image information and output device designation information via the network for designating a first imaging device included in the plurality of imaging devices (column 5, lines 15-20); and a plurality of imaging management devices (the hardware/software of the scheduler 50 that is located in various local workstations, column 3, lines 40-45, fig. 3) each in communication with the network (e.g., analyzes printer on the network, column 4, lines 45-50, column 6, lines 10-20) and including program logic (routines, fig. 3) that performs steps comprising determining whether the first imaging device is not busy (column 5, lines 15-30) and if so, causing an imaging job for forming an image based on the image information is executed by the first imaging device, and when it is determined that the first imaging device is busy, a second imaging device of the same kind as the first imaging device is selected from among the plurality of imaging devices and the imaging job is executed by the second imaging device, wherein the imaging devices, the imaging indicating device and the imaging management devices are connected by a network (column 3, lines 15-35).

Lobiondo does not specifically teach detecting whether the printer is operable or not, although it would have been obvious that when a printer is not operable, the scheduler would not try to schedule the printer to a non-operable printer.

Fan, in the same area of monitoring the status of a printer, teaches it is well known in the art to detect whether a printer is operable by a print management system (column 2, lines 5-20, column 2, lines 35-45).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: detecting whether the printer is operable or not such that the scheduler would not schedule a print job to the disable printer.

Regarding claim 2: Lodiondo teaches wherein the imaging management devices determine, before the imaging job is executed, whether the first imaging device is operable (column 4, lines 45-68, teaches the printer is analyzed before the print job is being printed by the printer).

Regarding claim 3: Fan teaches wherein, during execution of the imaging job, the imaging management devices determines whether the first imaging device is operable (column 2, lines 2-20, Fan teaches printer inherently would become disable during printing, and would be detected).

Regarding claim 4: Lobiondo teaches wherein the imaging management devices store and hold performance information of the imaging devices (column 4, lines 1-15), and when it is determined that the first imaging device is not operable, the imaging management devices mutually correct a difference of performance (column 3,lines 64-65, changes the printer form operable to non operable, and a slower printer would become a faster printer because the previously fast printer becomes disable, column 4, lines 50-60) between the first imaging device and the second imaging device, and execute the imaging job with the second imaging device (column 5, lines 15-35).

Regarding claim 5: Lobiondo teaches wherein, during execution of the imaging job by the second imaging device, the imaging management devices determine whether

the first imaging device is operable (column 2, lines 2-20, Fan teaches printer inherently

would become disable during printing, and would be detected), and when the first

imaging device is operable (when the printer become available at 445, during the cycle

of fig. 4, the printer would be used again, fig. 4, Lobiondo), the imaging management

devices control so that the imaging job is executed again by the first imaging device.

Regarding claim 6: Lobiondo teaches, wherein the imaging management

devices store and hold performance information of the plurality of imaging devices

(column 4, lines 1-15), and when it has been determined that the first imaging device is

operable, the imaging management devices interpolate the difference of performance

between the first imaging device and the second imaging device (column 4, lines 58-

61), and the imaging job is executed by the first imaging device (the fastest printer that

is operable).

4.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Lobiondo (US 5,287,194) in view of Fan et al (US 6,310,692) and Nosaki (US

5,673,373).

Regarding claim 21: Lobiondo teaches a system fig. 1) for printing an image via

a network (column 3, lines 20-30), the system comprising: (a) a plurality of printers (10,

column 3,lines 25-35) comprising different types with some printers being of the same

type, and each printer when in an operable state forming an image according to data

received by the printer from the network; (b) a computer (30, column 3, lines 25-35)

which outputs image and printer designation information to the network for printing an

image in accordance therewith on a printer among the plurality of printers designated in

the information (column 5, lines 15-20); and (c) a printer server (server with a scheduler,

column 3, lines 40-45) which receives the information output from the computer, the

printer server including program logic that when executed performs steps including: (i)

determining via the network whether the printer designated in the information received

from the computer is busy (column 5, lines 15-20; (ii) choosing the designated printer for

printing the image if the designated printer is in an operable state; (iii) if the designated

printer is not in an operable state, determining via the network if another printer of the

same type as the designated printer is in an operable state and if so, choosing the

another printer for printing the image (column 5, lines 29-31); and (iv) outputting the

data via the network to the chosen printer (column 5, lines 29-31).

Lobiondo does not specifically teach detecting whether the printer is operable or

not, although it would have been obvious that when a printer is not operable, the

scheduler would not try to schedule the printer to a non-operable printer.

Fan, in the same area of monitoring the status of a printer, teaches it is well

known in the art to detect whether a printer is operable by a print management system

(column 2, lines 5-20, column 2, lines 35-45).

Therefore, it would have been obvious to a person with ordinary skill in the art at

the time the invention was made to have modified Lobiondo to include: detecting

whether the printer is operable or not such that the scheduler would not schedule a print

job to the disable printer.

Lobiondo also does not teach the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image.

Nosaki, in the same area of printing using a print server, teaches the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image (column 6, lines 8-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo to include: the server converting information received from the computer to image data in a format suitable for the chosen printer to print the image.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Lobiondo by the teaching of Nosaki because: (a) it would have reduced the load of the client computer and would have allowed users with low cost computer to use the system of Lobiondo, (b) a server is a much power computer and would have convert the print data must faster compare to the client computer, and (c) it would have allowed Lobiondo's invention to be used in all situations to increase market share.

Conclusion

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Moore can be reached on 571-272-7437. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

June 22, 2006

KING Y. POON
PRIMARY EXAMINER